

Perinatal Oral Health: Information and Updates

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Why do we want pregnant women to see the dentist?



POOR ORAL HEALTH
AND EARLY BIRTH



CARIES TRANSMISSION



PREGNANCY RELATED
ORAL HEALTH ISSUES



INSURANCE
COVERAGE

This is not a drug over-dose story or an accidental death story, but rather a perinatal oral health story



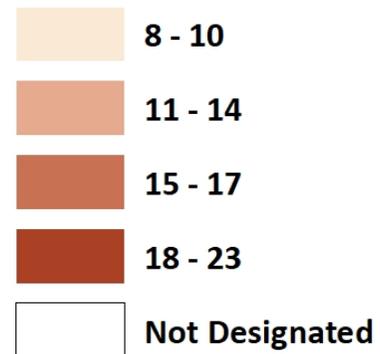
“Because pain was so great she took ‘excessive doses’ (Tylenol) resulting in toxicity to her and her baby. At the time she was approximately 29 weeks pregnant. The baby died from liver toxicity. My patient suffered acute liver failure and was flown to Pittsburgh expecting a liver transplant.”



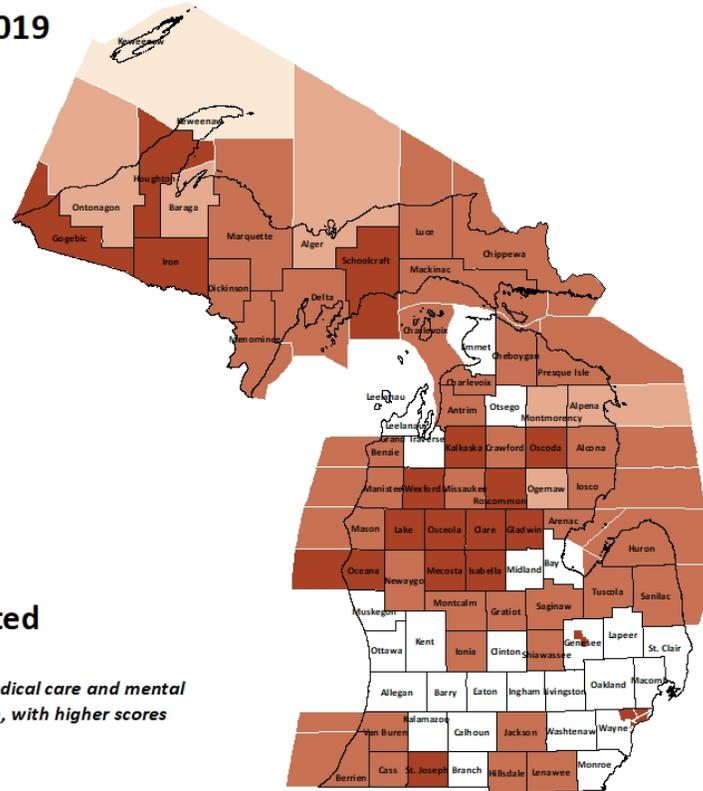
Oral Health In Michigan

Designated Health Professional Shortage Areas (HPSA) for Dental Care - Michigan, 2019

HPSA Score



HPSA scores range from 0-25 for primary medical care and mental health disciplines, and 0-26 for dental health, with higher scores indicating greater need.



Data Source: Health Resources and Services Administration (HRSA) Data Warehouse, as of 01/15/2019
 Map prepared by the Michigan Department of Health and Human Services (MDHHS), Office of Planning-Workforce & Access to Care Section.

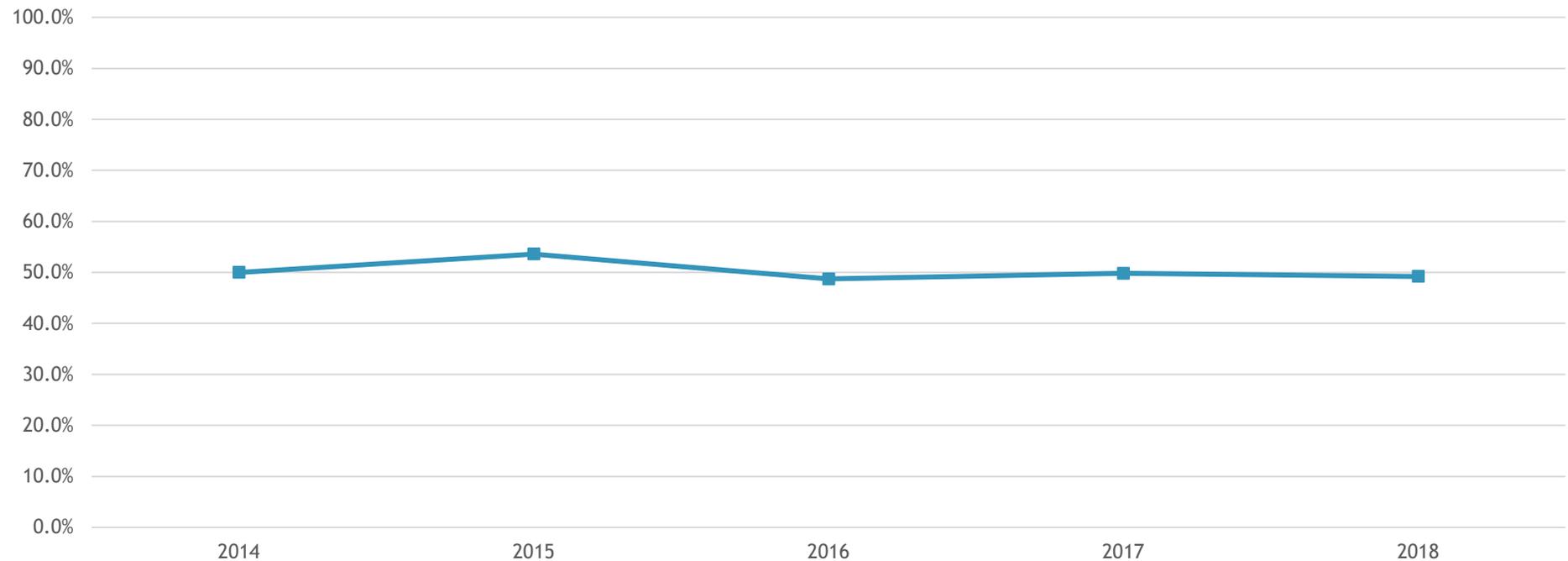
Michigan Landscape

Selected Title V NPM (National Performance measure) 13

- 13.1 Percent of women who had a preventive dental visit during pregnancy
- **ESM:** The number of medical and dental professionals who receive perinatal oral health education through MDHHS
- **Objectives:**
 - **Increase the number of medical and dental providers trained to treat, screen, and refer pregnant women and infants to oral health care services**
 - **Increase the number of pregnant women receiving oral health care services.**
- PRAMS Data utilized to measure this NPM

PRAMS Data: Dental Visit During Pregnancy

Indicator W.3. Percentage of Pregnant Women Who Reported Having Their Teeth Cleaned by a Dentist or Dental Hygienist During Pregnancy



Michigan Landscape: Successes

- ▶ Medicaid Expansion State (Healthy Michigan Plan)
- ▶ Healthy Kids Dental provides dental services for children on Medicaid 0-21
 - ▶ Widely accepted amongst private practice dentists
- ▶ 2018: Expanded Adult Medicaid Dental Benefit for Pregnant Women
 - ▶ Clients are now placed into a health plan
 - ▶ Benefits are active when the plan becomes aware of the pregnancy until 3 month's post partum or post end of pregnancy
 - ▶ Benefits at minimum mirror the current Medicaid benefits but the health plan may include additional benefits (i.e. Periodontal)
 - ▶ Heather will share more with us later!

Reported Intentions of Age One Dental Visits (%)

	Percent	95% CI
Dental Visit Intention		
Yes	64.7	62.9-66.3
No	35.3	33.7-37.1
Age, years		
<20	80.5	72.9-86.3
20-24	74.8	70.9-78.2
25-29	68.3	65.2-71.2
30-34	57.3	54.0-60.6
≥35	53.3	48.8-57.6
Education		
<High School	77.2	71.8-81.8
HS Graduate	75.5	72.2-78.6
Some College	64.6	61.5-67.7
College Graduate	52.9	49.9-55.9
Household Income		
< \$16K	82.2	79.1-85.0
\$16K - \$24K	71.8	66.9-76.2
\$24K - \$40K	69.9	65.1-74.3
\$40K - \$60K	57.6	52.5-62.6
≥ \$60K	50.9	47.8-53.9
Insurance		
Public	76.9	74.1-79.6
Private	57.9	55.7-60.2
None	71.6	64.2-77.9

PRAMS Data: Age One Intent

Based on the 2018 data set from the CDC, almost 65 percent of new Michigan mothers have the intentions of taking their child to the dentist before their first birthday.

Respondents who obtained less than a high school diploma had reported the intention of following through with the age one dental visits (77.2%) more than those who obtained a college degree (52.9%).

Women who had a household income of <\$16,000 had significantly higher intentions on taking their child to the dentist before their first birthday (82.2%) compared to women who had a household income of ≥\$60,000 (50.9%).

Women with public insurance (76.9%) or without insurance (71.6%) reported a significantly higher intentions to take their children to the dentist before their first birthday compared to women with private insurance (57.9%).

Michigan Landscape: Challenges



MOMS (Emergency Services Only Medicaid) does not cover dental care



Dental professional shortages continue to be an issue.

Specifically in rural areas/ upper peninsula
Wait times may stretch into months for comprehensive care



Very small number of Dentists accept traditional Medicaid

Reimbursement hasn't been raised since the 1990's.



Perinatal Oral Health Program

Launched January 2013

Housed under Michigan's Infant Mortality Reduction Plan (Now rebranded as the Mother Infant Health Improvement Plan)

Goal: Develop Comprehensive Perinatal Oral Health System for State of Michigan

What do we do?

Develop a statewide, comprehensive oral health Initiative

- ▶ Teach and educate both health professionals and the general public.
- ▶ Develop alternative and integrative models of care; we think outside the box!
- ▶ Assist clinics, coalitions, and programs who want to focus on perinatal oral health.
- ▶ Work to promote perinatal oral health into academic curriculum.
- ▶ Promote the enhanced Medicaid dental pregnancy benefit currently available.

Periodontal Disease and Preterm Birth

Numerous studies have documented an association between maternal periodontal disease and preterm birth and low birth weight.

▶ Bacteremia: Direct Mechanism

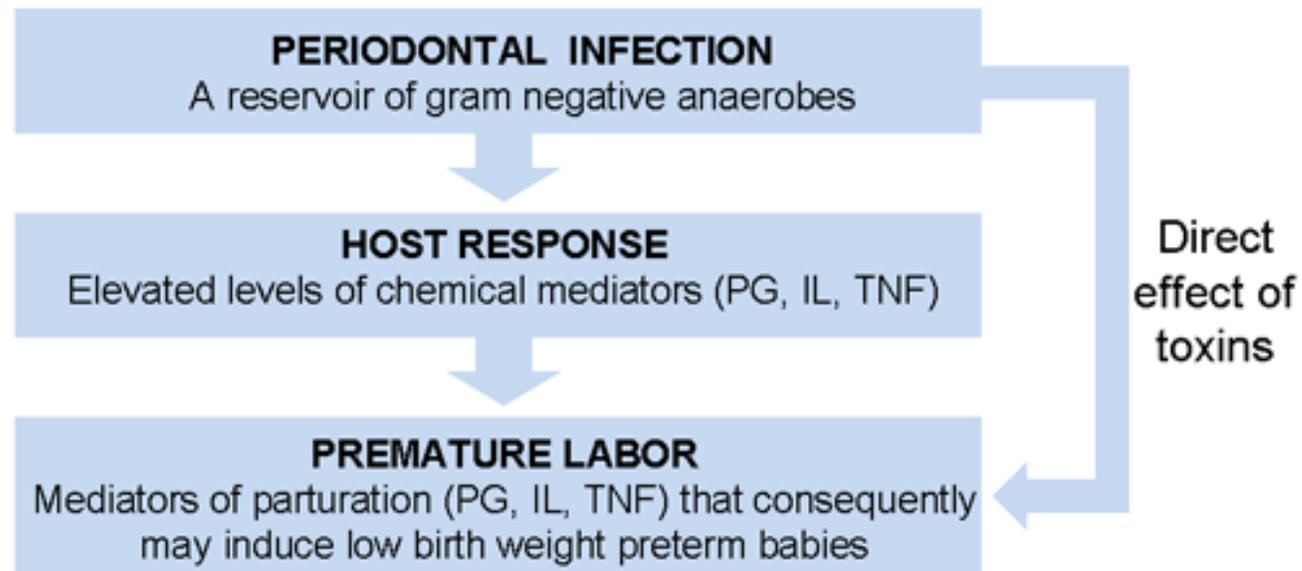
- ▶ Periodontal infection in the mouth may have direct effects on the uterus through bacteremia.
- ▶ 2019 UPDATE: bacteria have been found in amniotic fluid cultures.

Periodontal Disease and Preterm Birth

Several studies have documented an association between maternal periodontal disease and preterm birth and low birth weight.

- ▶ Preterm birth may result from a systemic inflammatory response to periodontal infection that increases prostaglandins and interleukins and affects labor initiation.
- ▶ Inflammatory response may lead to placental blood flow restrictions, placental necrosis, and consequent low birth weight.
- ▶ A similar mechanism has been proposed to explain the association seen between periodontitis and increased rates of heart disease and diabetes.

Periodontal Disease and Preterm Birth A Proposed Mechanism



Kumar J and Samelson R. Oral Health Care During Pregnancy and Early Childhood: Practice Guidelines. Albany, NY. New York State Department of Health. 2006. P. 23.

The Final Chapter Remains Unwritten

Since 1996, many other studies have been performed that have confirmed these adverse associations

Bad news: recent meta-analysis and larger studies have not shown any clear benefit in treating periodontal disease during pregnancy to reduce preterm birth and/or low birth weight

Good news (several things actually!)

Treatment of periodontal disease in pregnancy is safe

Clearly improves maternal oral health

Reduces vertical transmission of *S. mutans* and early childhood caries

Some data of improved obstetric outcomes

Caries Transmission



Cariogenic bacteria (*strep mutans*) can be transmitted from mother (OR sometimes caregiver) to infant child.

- ▶ We Are NOT born with cavity causing bacteria (*Strep mutans*); We acquire it from our environment.
- ▶ Transmission happens even before children develop teeth.
- ▶ Transmitted through kisses, pacifiers, bottles, spoons, forks, etc.

Caries Transmission



Early transmission of microbes is a significant risk factor for future caries experience.



Mothers with higher salivary levels of *Streptococci mutans* are more likely to infect their infants early in life.



Controlling these levels through preventive care for the mother has shown a reduction in the transmission.



Presents an opportunity for education and motivation

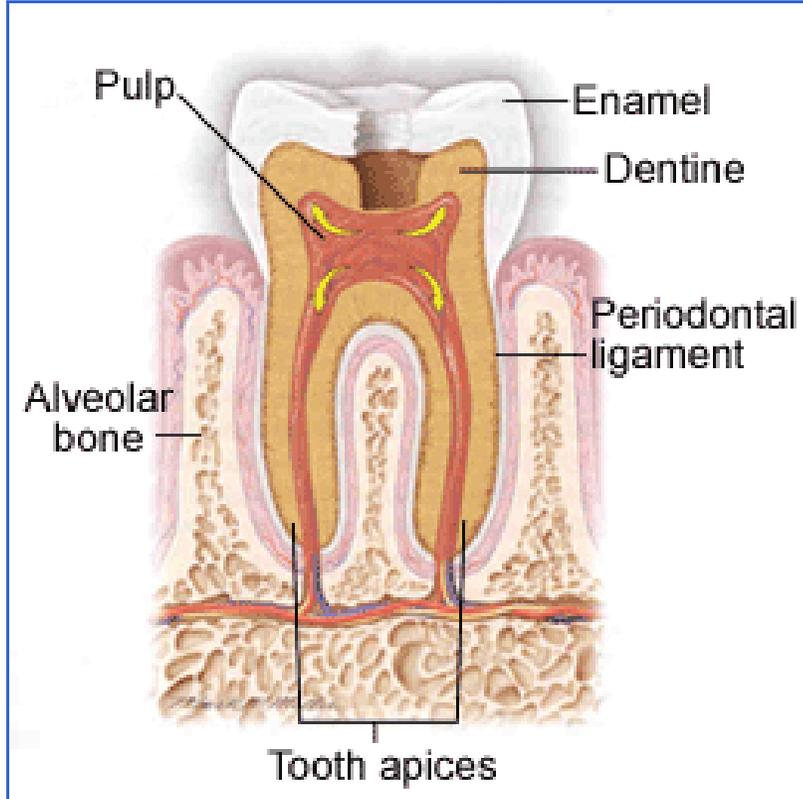
Let's Get Clinical

Common oral health conditions during pregnancy

- ▶ Pregnancy Gingivitis
- ▶ Pyogenic Granuloma
- ▶ Tooth Mobility
- ▶ Tooth Erosion
- ▶ Caries (Cavities)
- ▶ Periodontitis



Anatomy of the Tooth



The outer protective layer of the tooth is enamel, which is extremely hard.

The middle layer is dentin.

The pulp is composed of nerves and blood vessels that exit the tooth via the apices.

The root connects to alveolar bone via the periodontal ligament.

Pregnancy Gingivitis: An Inflammatory Response



**Mild
Gingivitis**



Moderately Severe Gingivitis

Pregnancy Gingivitis:
An increased inflammatory response to plaque during pregnancy causes the gingivae to swell and bleed more easily. Peaks in 3rd trimester. Women with gingivitis before pregnancy are more prone to exacerbation during pregnancy. Rinsing with saltwater may help, along with dental care.

Severe gingivitis, pyogenic granuloma, and caries

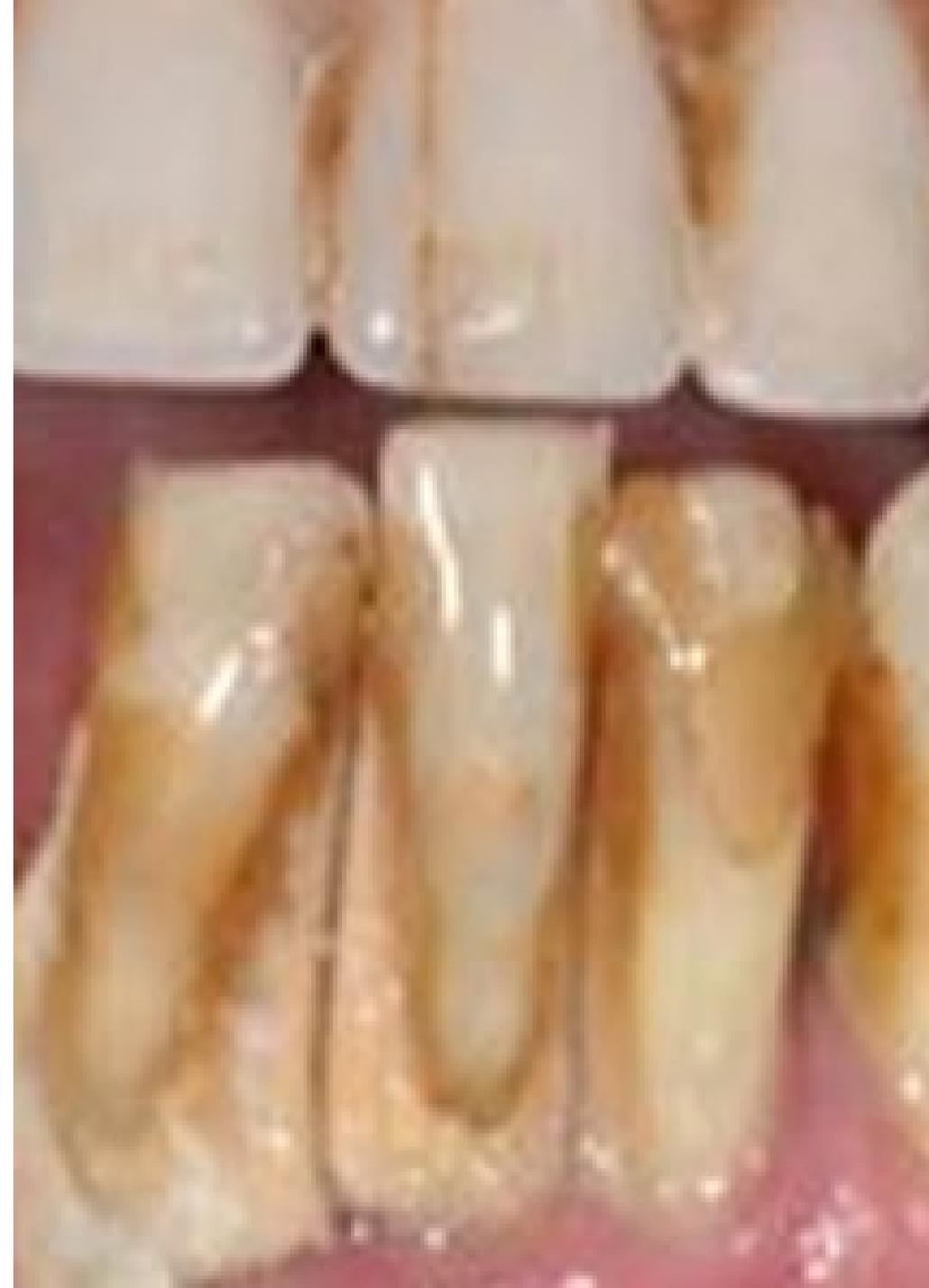


Photo courtesy of Dr. Shin-Mey Rose Yin Geist, Associate Professor, University of Detroit Mercy School of Dentistry

- ▶ **Pyogenic Granuloma:** Occurs in 5% of pregnancies. Vascularized and hyperplastic lesion up to 2 centimeters in diameter. NOT malignant and usually recedes after pregnancy. Also may be known as a “pregnancy tumor”
- ▶ **Caries:** Higher risk in pregnancy due to dry mouth and decreased saliva production, increased acidity in the mouth from vomiting or increased sugar intake from food cravings.

Periodontitis

- ▶ Caused by untreated gingivitis.
- ▶ Inflammatory response to plaque.
- ▶ Plaque adheres to teeth and releases toxins to create pockets of infection.
- ▶ Unlike Gingivitis, can destruct the periodontal ligament or bone.
- ▶ Teeth may be lost and bacteremia can result.



Oral Disease

Abscessed tooth



Photo courtesy of Dr. Francisco Plaza, Clinical Assistant Professor and Dr. Nahid Kashani, Clinical Associate Professor, University of Detroit Mercy School of Dentistry

- ▶ Localized collection of pus associated with a tooth
- ▶ **HIGHLY** painful, may be described as a throbbing or shooting pain
- ▶ Treatment with antibiotics and root canal/extraction
- ▶ If the infection spreads unchecked, it can spread to the bone and soft tissue (osteomyelitis and cellulitis.) It can also be deadly (Septicemia, brain abscess etc.)

Tooth Mobility



- ▶ Ligaments and bone that support teeth may temporarily weaken during pregnancy, which can lead to some tooth mobility.
- ▶ Typically, not a cause for concern unless other risk factors are present.

Tooth Erosion

- ▶ Can be caused by increased acid in the mouth from vomiting/ gastric reflux.
- ▶ Advise **AGAINST** brushing teeth immediately after vomiting.
- ▶ Rinse mouth with water or a water/ baking soda solution to neutralize acid. Wait 10 to 15 minutes to brush.
- ▶ Immediately brushing teeth after vomiting rubs acid directly into teeth, contributing to erosion.
- ▶ Tooth erosion can also be a sign of bulimia.



Michigan Initiative for Maternal & Infant Oral Health (MIMIOH)

Michigan Department of Health and Human Services – (Medicaid) provided one year one million dollar grant to Detroit Mercy Dental to develop and implement a pilot program to improve access to dental care for low-income at risk pregnant women and improve oral health outcomes for pregnant women and infants.



What is the Michigan Initiative for Maternal & Infant Oral Health (MIMIOH)

- ▶ A grant funded project and partnership between the Detroit Mercy Dental, the Michigan Primary Care Association (MPCA), and the Michigan Department of Health and Human Services (MDHHS). Now in second year with additional funding from Delta Dental.
- ▶ Places dental hygienists within the OBGYN departments of 10 Federally Qualified Health Centers. Hygienist's salary is paid for by the grant and equipment is provided. Sites were selected by competitive process and UDS data.
- ▶ Operating under the State of Michigan's PA161 program, these hygienists become part of the OBGYN care team and provide education, preventative care, and referrals for needed dental treatment.

Pilot Sites

- ▶ **Grace Health**
- ▶ **Great Lakes Bay**
- ▶ **Ingham County Health Department**
- ▶ **InterCare**
- ▶ **Upper Great Lakes**
- ▶ **Covenant Community Care**
- ▶ **The Wellness Plan**
- ▶ **Western Wayne**
- ▶ **Family Health Center Kalamazoo**
- ▶ **Family Medical Center, Monroe**

MIMIOH Project Goals

Expand	Expand the Grace Health Model that places hygienists in a PA 161 Program directly within OBGYN clinics.
Provide Services	Provide pregnant women dental services, education, and facilitate referrals for needed treatment
Data Collection	Collect demographic, caries risk, and dental disease data using EHR and EDR
Research	Collect saliva samples from participants (strep mutans testing research project)
Evaluate	Develop evaluation methodology

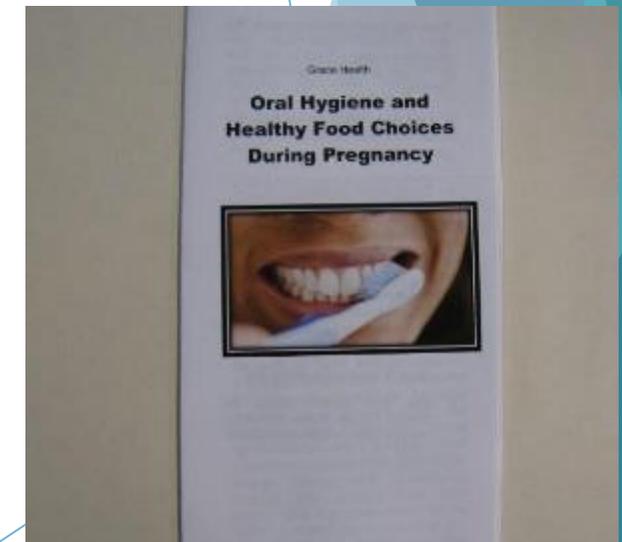
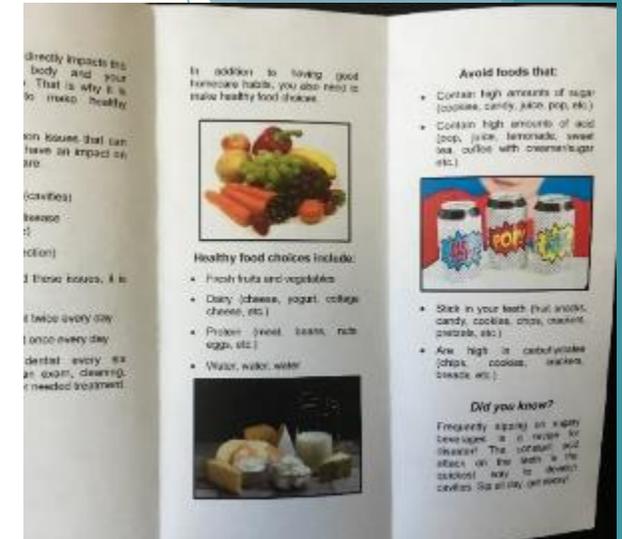
Visit one: 1st trimester

- **Screening interview: habit assessment**
- **Smoking cessation guidance**
- **Clinical oral health assessment**
- **Data acquisition within electronic dental record**
- **Schedule comprehensive oral examination with dentist**
- **Dental prophylaxis may be provided at the integrated operatory**



Visit Two: 2nd trimester

- Reassess needs
- Schedule appropriate dental appointments
- Dental prophylaxis may be provided at the integrated operator
- Address patient oral health concerns
- Assist with essential referrals (specialty services)
- Diet/nutrition counseling
- Oral health homecare during pregnancy



Visit Three: 3rd Trimester

- Reassess needs
- Schedule appropriate dental appointments
- Diet counseling for upcoming baby
- Age 1 Dental visit introduction
- Disease transmission education
- Early dental intervention

Slide developed By Dr. Kevin Steely and Staci Hard, RDH of Grace Health in Battle Creek, MI.

Grace Health
Caring for Your Children's Teeth



By the age of 2 years children should have all 20 of their baby teeth. Even though all 20 of those baby teeth are supposed to fall out (between the ages of 12-13 years), they serve multiple important functions until then. Baby teeth help children chew food, aid in proper speech and hold space in the dental arch for adult teeth. It is important to keep baby teeth healthy so that they can serve all of those purposes and are able to fall out naturally at a proper age.

It is very important to take steps to avoid baby bottle decay in the infant-toddler years!



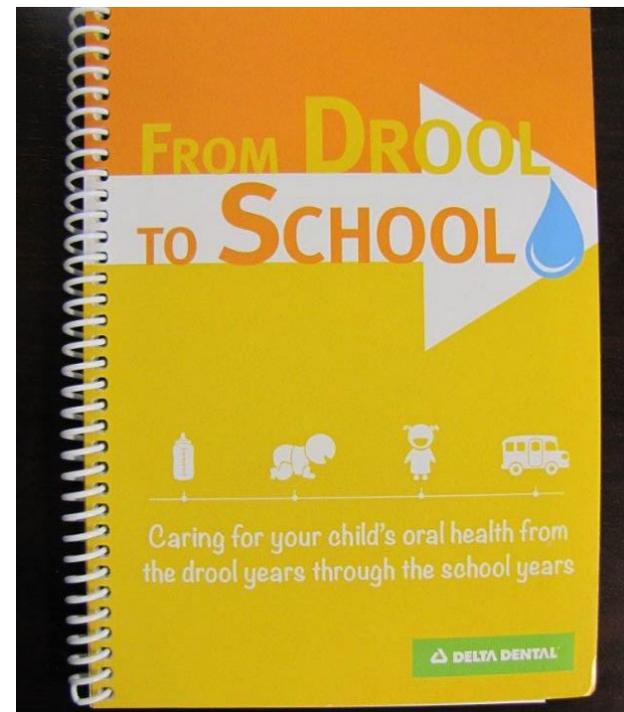
- Never allow your child to fall asleep with a bottle containing milk, chocolate milk, formula, juice or any other sweetened beverage
- Never fill your child's bottle with liquids that contain sugar or acid (juice, pop, sports drinks, etc.)
- If your child needs sucking motion for comfort to sleep, give them a bottle of water or a clean pacifier
- Never dip your child's pacifier in anything sweet
- Once your child is eating solids, water is only liquid that should be offered between meals
- Never share eating utensils or put the child's pacifier in your mouth

There are many ways to help keep baby teeth healthy and intact in your child's mouth.

Visit Four: Postpartum

- Reassess needs
- Schedule appropriate dental appointments
- Provide dental gift: “From Drool to School” book, infant finger brush and toothbrush
- Stress Age 1 dental visit importance
- Facilitate second dental prophylaxis for mother as indicated

Slide developed By Dr. Kevin Steely and Staci Hard, RDH of Grace Health in Battle Creek, MI.



Centering Pregnancy

- Group-based prenatal care
- Longer appointments with provider and support staff
- Professional guest speakers: pediatrician, dental hygienist, behavioral health specialist



Barriers to Receiving Care

Dental Community

- ▶ Misconception as unsafe during pregnancy; unfounded concerns over safety and litigation
- ▶ There have been NO valid lawsuits against dentists regarding dental care and subsequent pregnancy complications in Michigan.
- ▶ Consensus: If a woman has pregnancy complications due to the refusal of her dentist to treat oral health conditions, that dentist is MUCH more liable than if he/she did not treat!

Barriers to Receiving Care

Patient Barriers

- ▶ Women don't understand why oral health care is important
- ▶ Oral Health may be perceived as a luxury
- ▶ Not always a standard of prenatal/ pregnancy care
- ▶ Fear
- ▶ Socioeconomic Barriers etc
- ▶ Under the age of 18, pregnant, with no guardian present



Barriers to Receiving Care

Dental Community

- ▶ Lack of dentists who accept Medicaid
- ▶ Dentists may be siloed in their community with a lack of interprofessional practice.
- ▶ Unsure of pharmaceutical considerations
- ▶ Unwillingness of dentists to treat pregnant women; many were taught to defer treatment.
 - ▶ Originally: NO dental treatment during pregnancy...
 - ▶ Then: Only in 2nd trimester and only if urgent.....
 - ▶ Then: All dental care in 2nd trimester.....

Current National Consensus: Treat ASAP

Strategies to Integrate and Overcome Barriers

Know your local dental community

Who takes Medicaid? (MCDC, FQHC's, other local community clinics, etc)

Are they accepting new patients? Do they have a waiting list? How long?

Will they see pregnant patients? Any trimester?

Does the dentist require a formal referral and/or signoff from an OBGYN?

Strategies to Integrate and Overcome Barriers



Ask the right questions!

DO NOT only ask “ Do you have a dentist/ dental home?”

If a woman saw a dentist at an office 12 years ago, she still may say yes.....

Instead:

When was the last time you went to the dentist?

Are they local?

Could you call them tomorrow and make an appointment if you needed to?

Strategies to Integrate and Overcome Barriers

Use this as an opportunity to discuss other important topics

For example:

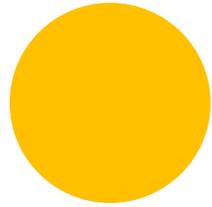
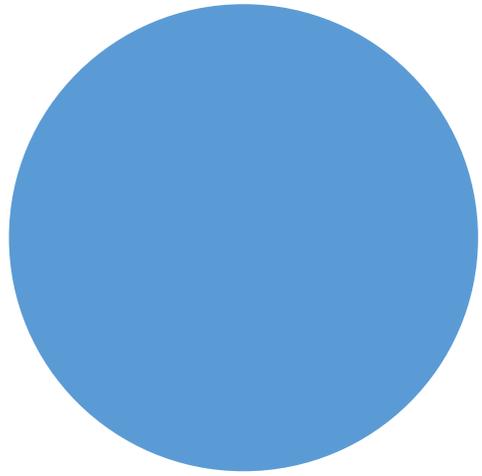
- ▶ Smoking cessation and reducing oral cancer risk
- ▶ HPV vaccination
- ▶ Nutrition
- ▶ Obesity

Resources

[Michigan.gov/oralhealth](https://michigan.gov/oralhealth)

- ▶ Guidelines
- ▶ Pregnancy and Opioid Guidelines for dental professionals
- ▶ Free materials in multiple languages
- ▶ Resources and studies





Michigan Medicaid
Dental Benefits 101



Dental Coverage

- Medicaid Fee-For-Service
- Healthy Michigan Plan
- Healthy Kids Dental

Fee-For-Service



Medically Necessary treatment covered like exams, cleanings, fillings, extractions and partials/dentures.



Network of providers



Contact the local health department for outreach services

Pregnant Women Dental Coverage



Enrolled in 1 of the 10 Medicaid Health Plans or Fee-For-Service



Most Managed Care Plans contract with a dental benefit manager.



Beneficiaries enrolled in Healthy Kids Dental and Healthy Michigan Plan receive services through the Dental Health Plan.

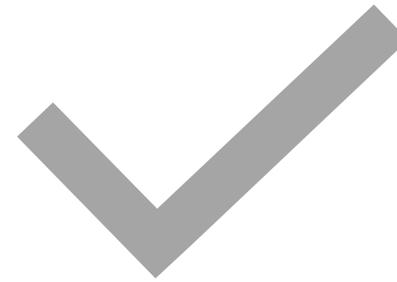


Benefit begins when the Health Plan is made aware of the beneficiary's pregnancy

Pregnant Women Dental Coverage



Provided for the duration of the beneficiary's pregnancy and 3 months postpartum.



Example: Pregnancy Due Date 1-15-2020
Coverage ends 4-30-2020

Governor
Whitmer's
Proposed
2021 Budget

- Proposed extending postpartum Medicaid benefits for new mothers to 12 months.

Healthy Kids Dental

Delta Dental

Blue Cross Blue
Shield Michigan

Healthy Kids Dental



Diagnostic Services



Preventive Services



Restorative Treatment



Endodontics



Prosthodontics



Oral Surgery



Adjunctive General Services

Early and Periodic Screening, Diagnosis and Treatment

- Follows the American Academy of Pediatrics(AAP) and the American Academy of Dental Pediatrics(AADP) recommendations
- Modify as needed for children with special needs, disease or trauma.
- Importance of early professional intervention and continuity of care based on individual need

Age One Dental Visit

AAP & AAPD recommend within 6 months of the first tooth erupting or by about 12 months at the latest.

1st Dental Visit?
By age one or when
the first tooth
appears!



Age One Dental Visit



Baby bottle
tooth decay



Infant feeding
practices



Mouth cleaning



Teething



Pacifier habits



Finger-sucking
habits

Coverage for Native Americans

Most receive
treatment at
Tribal Health
Centers that
have dental
centers.

Are not
required to
enroll in a
Health Plan

Auto enrolled in
HKD but they
can opt out

Covered
services follows
Medicaid policy

Maternity Outpatient Medical Services Policy

- ESO – Emergency Services Only
- No coverage for dental care
- Beneficiaries who do not meet the citizenship requirement

Resources: <https://www.insurekidsnow.gov/>



Search | Get Email Updates | En Español

1-877-KIDS-NOW (1-877-543-7669)

Find Coverage for Your Family | Campaign Information | Outreach Tool Library | Webinars & Videos | Campaign Notes eNewsletter | Initiatives

Millions of children and teens qualify for free or low-cost health and dental coverage through Medicaid & the Children's Health Insurance Program (CHIP).

[Learn about coverage options](#) for your family or help us [spread the word](#) about free or low-cost health insurance coverage!

Find a Dentist

Use the Dentist Locator to find a dentist in your community who sees children and accepts Medicaid and CHIP.

[En Español](#) [Share](#)

Find a Dentist for Your Kid

* Required

State*

Benefit Plan*

Search by Address, ZIP Code

InsureKidsNow.gov

Find Coverage for Your Family

Medicaid and CHIP offer free or low-cost health insurance for kids and teens. **Select your state** to find information on health insurance programs in your state or call **1-877-KIDS-NOW** (1-877-543-7669).

Select Your State

[View State](#)

Spread the Word!

Use our public service announcements (PSAs) to help spread the word about Medicaid & CHIP.



[EXPLORE THE LIBRARY](#)

New Connecting Kids to Coverage Outreach and Enrollment Guide

We have new [awards](#) and a new tool in the Outreach Tool Library to help connect uninsured American Indian and Alaska Native children to coverage.



Resources www.insurekidsnow.gov

How to Get Started

Call **1-888-988-6300** to talk to someone in Michigan or check out the state websites below.

Medicaid/CHIP information in Michigan:

- [Healthy Kids Program Information](#)
- [Apply for Healthy Kids](#)
- [MIChild Program Information](#)
- [Apply for MIChild](#)

Getting Dental Care

Your child needs to have Medicaid or CHIP coverage in order to get dental benefits. Once your child has coverage through Medicaid or CHIP, he or she can get dental care. Find information about dental care in Michigan here:

- [Find a Dentist](#)

Dental Plan *(items with * are required)*

State: * ?

Benefit Plan: * ?

Near: ?

Within: ?

Accepts new patients: Yes No Preference ?

Additional Search Criteria Expand +

Resources: www.insurekidsnow.gov

Dentists		
State: MI Benefit Plan: Medicaid Within 10 miles of 400 S. Pine Lansing, MI		Show Map ▾
Show	10 ▾ entries	Search <input type="text"/>
Dentist	Information	Links
 Lansing, MI 48933-1124 Telephone:  Distance: ~ 0.52 miles away ✓ Accepts New Patients	Benefit Plan: Medicaid Specialty: General Dentistry Can Accommodate Special Needs: Yes Last Update Date: 2020/1/6	Get driving directions (Redirects to Google Maps) Full profile details Map this result
 Lansing, MI 48933-2407 Telephone:  Distance: ~ 0.54 miles away ✓ Accepts New Patients	Benefit Plan: Medicaid Specialty: General Dentistry Can Accommodate Special Needs: No Last Update Date: 2020/1/6	Get driving directions (Redirects to Google Maps) Full profile details Map this result
 Lansing, MI 48933-2407 Telephone:  Distance: ~ 0.54 miles away ✓ Accepts New Patients	Benefit Plan: Medicaid Specialty: General Dentistry Can Accommodate Special Needs: No Last Update Date: 2020/1/6	Get driving directions (Redirects to Google Maps) Full profile details Map this result
 Lansing, MI 48915 Telephone:  Distance: ~ 0.74 miles away ✓ Accepts New Patients	Benefit Plan: Medicaid Specialty: General Dentistry Can Accommodate Special Needs: No Last Update Date: 2020/1/6	Get driving directions (Redirects to Google Maps) Full profile details Map this result



Resources - FQHCs

- Federally Qualified Health Centers
- Federal Grants
- Accept everyone
- Sliding scale fee
- Not all have dental clinics



Resources

- My Community Dental Centers
- Dental Clinics North
- Dental Schools – U of M and University of Detroit Mercy

Questions?

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